

### ABSTRACT

An improved system for generating electrical power using a fuel cell. More particularly, a system for generating hydrogen gas by reacting water vapor with a substantially non-fluid substance and transporting the generated hydrogen gas to the fuel cell which generates electrical power. Reacting water vapor with the non-fluid hydrogen generating substance rather than liquid water prevents caking of the non-fluid substance and deposition of byproducts onto the non-fluid substance that interfere with continued generation of hydrogen gas. Also, a non-electrically actuated valve for use in a hydrogen gas generating apparatus which regulates the generation of hydrogen as required by the fuel cell.